10

Abstract

Optical wireless links automatically re-acquire alignment after detecting the loss of an incoming signal bearing light beam. The loss of the signal may be due to a temporary blockage of the light path, so the devices will await a programmable period of time before attempt to re-align themselves. If re-alignment is required, the devices will first position their light beams to the last known aligned position and will from that point sweep through a pattern seeking to re-align with the remote device. The devices transmit their beam position information during the sweep, which information will be echoed back or fed back to the device once its beam impinges upon the remote devices photodetectors. If the devices cannot re-align, then a second, longer sweep pattern may be performed, starting at some predefined default location.

TI-32926 35